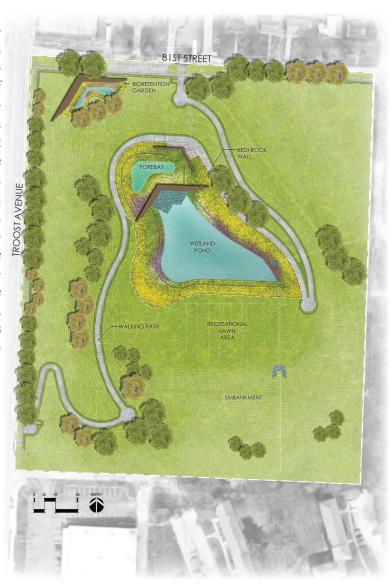


# TARGET GREEN / MARLBOROUGH NEIGHBORHOOD 81ST AND TROOST

Construction is in progress on green infrastructure projects within Kansas City's Marlborough neighborhood near 81st and Troost Avenue. Improvements underway include the construction of a wetland pond feature to capture and filter stormwater, landscape features and storm sewer system improvements. This work is part of a larger project required by the federal consent decree to reduce combined sewer overflow to our streams and rivers. These green infrastructure projects meet federal water quality regulations and were recently awarded a national sustainability award for utilizing green infrastructure. This work is scheduled to be complete in December 2017. Once complete, it will help protect our community's environment by reducing the amount of stormwater entering our sewer system, which will lessen the frequency of sewer overflows and basement backups in the area and reduce downstream flooding.

## **PROJECT AREA**

(graphical rendering, at right, of the completed project)



### QUESTIONS?

TO LEARN MORE, PLEASE CONTACT:

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#### WHAT'S BEING DONE?

Key improvements in the area include:

- A wetland pond feature to treat stormwater collected along Troost Avenue
- Community-inspired landscape features such as terraced rock walls, recreational lawn area provide an amenity for both the neighborhood and region
- Future recreational opportunities related to nature and play are being identified through a series of community engagement activities. For more information about these projects contact the Marlborough Community Coalition at marlboroughcoalition@gmail.com.
- Storm sewer system improvements
- Downstream flood reduction, protecting properties during a 100-year event



#### WHAT'S THE TIMELINE?

Work is currently underway and scheduled for completion by December 2017. Following construction, maintenance will be completed between 2017 and 2020 by the contractor to ensure the site looks and functions as expected. Additional work may continue beyond 2017 to complete other features around the site that will be completed by Parks with a Purpose and through future PIAC funded community improvements.

#### WHAT CAN YOU EXPECT?

We appreciate your patience and support as we work to complete this important community project. Customers will be notified in advance of when disruptions will occur, which may include temporary street closures and temporary sewer service disruption.

#### WHO'S DOING THE WORK?

KC Water is being assisted by Radmacher Brothers Excavating and CDM Smith.

#### WHAT'S THE CONTRACT AMOUNT?

The construction bid cost is \$9,000,000 for this project.

#### **HOW LARGE IS THE TOTAL SITE?**

The total site area is 9.5 acres



#### WHAT HOURS WILL PEOPLE BE ALLOWED ON THE PROPERTY?

There is no perimeter fencing to prevent access to the property following construction that would restrict access to the property. It is recommended that the property be accessed between dawn to dusk for safety.

#### WHERE IS THE WATER COMING FROM THAT WILL GO INTO THE BASIN?

Water flowing into the basin will be stormwater runoff from Troost Ave. and neighborhood streets to the north of the site.

#### WILL THERE BE STANDING WATER ALL OR PART OF YEAR? WHEN THERE IS, HOW DEEP WILL IT BE?

There will be a wetland pond within a portion of the site year around. The depth of water will vary with the deepest areas being in the center of the main pool which will be less than 4 feet. The depth of the water near the edges will be less than 6 inches with a very gentle slope to prevent someone from falling into deeper water.

#### **WILL IT BE CLEAN OR DIRTY?**

The water will be generally clear most of the time except following a rain event, when the water may look dirty from sediment in the water which will eventually fall out and settle on the bottom of the wetland pond. This is a natural process that supports a wetland and helps clean the water.

#### WILL THERE BE FISH IN THE STANDING WATER?

There may be small minnows, crawdads, or tadpoles in the water, but no fish of any size will be present. A water depth of 8 feet or greater is required to support fish.

#### HOW LONG WILL THE DEEPER STANDING WATER BE THERE AFTER A RAIN?

When it rains 1-2 inches, the standing water outside of the wetland pond area will be 1 to 3 feet deep. When it rains 2-5 inches, the standing water may be as much as 5 feet deep. When it rains 5-7 inches, the depth of water will be as much as 7 to 8 feet. In the event of a very extreme event of more than 7 inches of rain, the depth of water will reach a maximum of 14 feet.

These temporary water depths will be quickly lowered following a rainfall event with most water released in the first 3 hours after the rain stops. In very large rain events, some standing water of less than 2 feet will remain for a period up to 12-18 hours, but all water will be released within 24 hours.

# WHEN IT IS RELEASED, WILL WATER OVERFLOW THE TOP OF THE EMBANKMENT OR GO OUT THROUGH UNDERGROUND PIPES?

All water will be released through underground pipes. The embankment is designed with an emergency spill-way to route water over and around the embankment, but only in the event of an unforeseen emergency.

#### WILL THERE BE A FENCE AROUND THE BASIN TO KEEP CHILDREN OUT?

There will not be a fence around the basin but there will be signs to warn the public about staying out of the water. Once established, native plants around the perimeter of the wetland pond will deter people from entering the water.

#### WHAT ABOUT THE PRESENCE OF GEESE AND MOSQUITOES?

Geese typically flock to larger water bodies that have much deeper water than this location. There may be a chance that geese could be seen at this site in the future, but it is unlikely that they will be an issue.

Mosquitoes are typically found in areas that have standing water. Wetlands similar to this project tend to have fewer mosquitoes than other areas with standing water because the water is not protected from predators like dragonflies. KC Water is monitoring mosquitoes and mosquito larva at all of the green infrastructure sites as part of the maintenance program, and this site will also be monitored for mosquitoes. If mosquitoes become an issue, steps will be taken to reduce them.

#### WHO WILL MAINTAIN THE AREA?

KC Water will maintain the entire site until such time there are recreational features such as play and sitting areas added on the site. Those responsible for maintenance of those specific features will be identified at the time they are constructed.

#### WILL THERE BE LIGHTS ON THE TRAIL?

Lights are not included in the current construction contract; however, adding them is a high priority to the neighborhood as funding is identified.

#### **WILL THERE BE RESTROOMS?**

Not initially, but they will be considered when other recreational features are added to the site such as play and sitting areas.

#### WHAT'S THE "CONSENT DECREE"?

In 2010, KC Water entered into a Federal Consent Decree with the United States Environmental Protection Agency to reduce the volume and frequency of overflows from the City's sewer system. Kansas City's Overflow Control Program is a 25-year plan to address this challenge. The Marlborough Green Infrastructure projects are one piece of the Overflow Control Program and is required by the Consent Decree to be completed by December 31, 2017.

